## March Edition: Stem Cell Wars



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About the Author

Kerby Anderson is National Director of Probe Ministries International. He holds masters degrees from Yale University (science) and from Georgetown University (government). He is the author of several books, including Christian Ethics in Plain Language, Genetic Engineering, Origin Science, and Signs of Warning, Signs of Hope. His new series with Harvest House Publishers includes: A Biblical Point of View on Islam and A Biblical Point of View on Homosexuality. He is the host of "Point of View" (USA Radio Network) and regular guest on "Prime Time Dear Unite the USA members,

President Obama recently signed an executive order allowing embryonic stem cell research. In response to this event, Unite the USA is pleased to present *Stem Cell Wars*, an article by Kerby Anderson. Learn the difference between adult and embryonic stem cells in this insightful edition of Unite the USA.

God bless you,

Carrie and Stacie Stoelting

## **Stem Cell Wars**

By Kerby Anderson Probe.org

#### Background

Stem cells are the basic cells in our body. They get their name from their similarity to the stem of a plant which gives rise to branches, bark, and every other part of a plant. Embryonic stem cells are the cells from which all 210 different kinds of tissue in the human body originate. As an embryo develops into a blastocyst, a few layers of cells surround a mass of stem cells. If these stem cells are removed from the blastocyst, they cannot develop as an embryo but can be cultured and grown into these different tissues.

Stem cells are undifferentiated and self-replicating cells that have the potential to become the other differentiated cells in our body. And that is why there is so much scientific and political attention being paid to stem cells.

The potential for stem cell research is enormous and intoxicating. Nearly 100 million Americans have serious diseases that eventually may be treated or even cured by stem cell research. Many diseases (like Parkinson's, heart disease, diabetes) result from the death or dysfunction of a single cell type. Scientists hope that the introduction of healthy cells of this type will restore lost or compromised function.

#### **Moral Perspective**

The moral problem with the research is that to obtain human embryonic stem cells, the embryo is destroyed. Embryos needed for human embryonic stem cell research can be obtained from three sources: (1) in-

America" (Moody Broadcasting Network) and "Fire Away" (American Family Radio). He produces a daily syndicated radio commentary and writes editorials that have appeared in papers such as the Dallas Morning News, the Miami Herald, the San Jose Mercury, and the Houston Post.

### **Action Center**

If you want to take action and make an impact in our country, follow these five helpful hints:

1. Pray! Releasing your concerns to the Lord and praying for our country are vital and effective.

2. Write or call your state legislators about your views on state level issues. Many state legislators are interested in hearing from their voters. One letter/call is considered to represent at least 200 people. So, take action and reach out to your legislators!

3. Donate time and/or money to causes fighting for our rights.

4. Visit our lawmakers at town hall meetings and intelligently explain your views.

5. Get involved in our country, learn about America's history, and increase your passion for patriotism. Education is the key to effective action.

# **Thank You**

Thank you for reading this edition of Unite the USA. Your readership is important to us. We appreciate your patriotism and efforts to Unite the USA!

Sincerely,

Carrie and Stacie Stoelting www.unitetheusa.org

vitro fertilization used to produce embryos, (2) frozen embryos which are spare embryos left over from in-vitro fertilization, or (3) human cloning of embryos.

In addition to the moral problem is the scientific reality that embryonic stem cell research has not been successful. Although human embryonic stem cells have the potential to become any type of human cell, no one has yet mastered the ability to direct these embryonic cells in a way that can provide possible therapy for humans afflicted with various diseases.

Numerous stories are surfacing of the problems with human embryonic stem cells. One example took place in China where scientists implanted human embryonic stem cells into a patient suffering from Parkinson's only to have them transform into a powerful tumor that eventually killed him.

Often the media has not been telling the truth about embryonic stem cell research. So why hasn't the media accurately covered this issue? "To start with, people need a fairy tale," said Ronald D.G. McKay, a stem cell researcher at the National Institute of Neurological Disorders and Stroke. "Maybe that's unfair, but they need a story line that's relatively simple to understand."

What has been lost in all of this discussion is the humanity of the unborn. Proponents of embryonic stem cell research argue that an embryo or fetus is a "potential" human life. Yet at every stage in human development (embryo, fetus, child, adult), we retain our identity as human beings. We are humans from the moment of conception. We do not have the right to dismember a human embryo because it's unwanted or located in a test tube in a fertility clinic.

Also lost in this discussion is the success of using stem cells from sources other than embryos. Successful clinical trials have shown that adult stem cells as well as umbilical cord blood have been very effective. These sources may provide cures for such diseases as multiple sclerosis, rheumatoid arthritis, systematic lupus, etc. Some studies seem to indicate that adult stem cells create "fewer biological problems" than embryonic ones.

No moral concerns surround the use of human adult stem cells since they can be obtained from the individual requiring therapy. And using blood from umbilical cords of newborns does not raise any significant concerns because the newborn is not harmed in any way.

In the last few years, stem cells have also been found in tissues previously thought to be devoid of them (e.g., neural tissue, nasal passages). And human adult stem cells are also more malleable than previously thought. For example, bone marrow stem cells can produce skeletal muscle, neural, cardiac muscle, and liver cells. Bone marrow cells can even migrate to these tissues via the circulatory system in response to tissue damage and begin producing cells of the appropriate tissue type.

Human adult stem cell research is already effective and raises none of the moral questions of human embryonic stem cell research. Even biotech industry proponents of embryonic stem cell research believe that we may be twenty years away from developing commercially available treatments using embryonic stem cells.

Adult stem cell research is already effective. Embryonic stem cell research is not.